

CLAIMS

1. (previously presented) A Spreader structure for insertion into a hollow organ, said spreader structure comprising:

an elongated body having a circumference and a longitudinal axis;

a first connecting section located at one end of the elongated body;

a second connecting section located at a second end of the elongated body opposite the first connecting section;

a plurality of spreader rods radiating from the first connecting section, extending substantially along the longitudinal axis of said elongated body to the second connecting section, and distributed over the circumference of the elongated body and wherein the spreader rods are positionable against a wall of the hollow organ by means of radial expansion; and

at least one area of said spreader rods along the longitudinal axis having reduced flexural stiffness in comparison to adjacent areas thereto.

2. (previously presented) The spreader structure according to Claim 1, wherein the at least one area having reduced flexural stiffness has a reduced cross sectional area.

3. (previously presented) The spreader structure according to Claim 1, wherein the at least one area having reduced flexural stiffness has a non-linear rod section.

4. (previously presented) The spreader structure according to Claim 1, wherein the at least one area having reduced flexural stiffness has a meander-shaped rod section.

5. (previously presented) The spreader structure according to Claim 1, wherein the at least one area having reduced flexural stiffness has a wave-shaped rod section.

6. (previously presented) The spreader structure according to Claim 1, wherein the at least one area having reduced flexural stiffness has a zigzag-shaped rod section.

7. (previously presented) The spreader structure according to Claim 1, wherein the at least one area having reduced flexural stiffness has a square cross section.

8. (previously presented) The spreader structure according to Claim 1, wherein the first and second connecting sections are designed as central hubs of the spreader rods in the area of the longitudinal axis.

9. (previously presented) The spreader structure according to Claim 1, wherein at least one of the connecting sections has an opening through which a central rod can be slid through to the other connecting section.

10. (previously presented) The spreader structure according to Claim 1, wherein the first and second connecting sections are substantially cylindrical.

11. (previously presented) The spreader structure according to Claim 1, wherein each of the spreader rods, starting from the first connecting section, has a first section that radially curves outward as well as a subsequent substantially straight second section.

12. (previously presented) The spreader structure according to Claim 1, wherein the plurality of spreader rods comprises six spreader rods evenly distributed over the circumference.

13. (withdrawn) A Spreader structure, for insertion into a hollow organ, said spreader structure comprising:

- an elongated body having a circumference and a longitudinal axis;

- a first connecting section located at one end of the elongated body;

- a second connecting section located at a second end of the elongated body opposite said first connecting section;

- a plurality of spreader rods extending from the first connecting section substantially along the longitudinal axis of the elongated body to the second connecting section, and distributed over the circumference of the elongated body, wherein the spreader rods can be positioned against a wall of the hollow organ by means of radial expansion;

- a filter membrane arranged between at least two spreader rods wherein said filter membrane can assume a substantially unfolded state by means of the radial expansion of the spreader rods.

14. (withdrawn) The spreader structure according to Claim 13, further comprising a filter membrane arranged between all adjacent spreader rods.

15. (withdrawn) The spreader structure according to Claim 13, further comprising a distal end section, a proximal end section, and a midsection, wherein the filter membrane extends starting from the distal end section to the midsection.

16. (withdrawn) The spreader structure according to Claim 15, wherein the filter membrane extends from the proximal end section to the midsection thereof.

17. (withdrawn) The spreader structure according to Claim 13, wherein the filter membrane has pores created by at least one of boreholes, braided woven strands, and a net structure.

18. (withdrawn) The spreader structure according to Claim 17, wherein the pores have a free diameter ranging between approximately 50 μm and 100 μm .

19. (withdrawn) The spreader structure according to Claim 13, wherein the filter membrane is made of at least one of nitinol, ePTFE, dacron, polyester, polyurethane, polyacrylic, silicone, and EPDM.

20. (withdrawn) The spreader structure according to Claim 13, wherein the filter membrane is attached to at least one spreader rod by HF-welding, gluing, recasting, or hot pressing.

21. (withdrawn) The spreader structure according to Claim 13, wherein the filter membrane is formed between at least two spreader rods by at least one of dipping and spraying.

22. (previously presented) The spreader structure according to Claim 21, wherein use of spreader structure can be selected from a group comprising: a miniature catch basket for gallstones, urethroliths, kidney or bile duct stones; for trapping foreign bodies in the esophagus; in urology and gastroenterology; in the area of the peripheral and the coronary circulatory systems; as a distal embolic protection; as a temporary vena cava filter; in a septic occluding system and/or in an aneurysm occlusion system, and/or as a blood particle filter or foreign body trap assist, and in contrast nephropathy.

23. (previously presented) The spreader structure according to Claim 21, wherein use of said spreader structure can be selected from a group comprising: a metal electrode for introducing heat to a wall of the hollow organ, and in particular for performing an electrocoagulation at the site.

24. (previously presented) The spreader structure according to Claim 21, further comprising a central rod introduced through through the first connecting section and

attached to the second connecting section, wherein the central rod includes a tube surrounding the central rod so that the first connecting section can be slid along the central rod along the longitudinal axis.

25. (previously presented) The spreader structure according to Claim 24, further comprising a sheath into which the central rod and the tube can be inserted and wherein the spreader structure can be opened during or after it has been ejected from the sheath.

26. - 28. Cancelled

29. (original) A method of using a spreader structure for insertion into a hollow organ, the method comprising:

providing an elongated body having a plurality of spreader rods extending evenly from around the elongated body, wherein the spreader rods each have at least one area of reduced flexural stiffness in comparison to adjacent areas;

positioning the elongated body on a spreader device;

inserting the elongated body and spreader device into the hollow organ while the elongated body is at least partially compressed; and

expanding the elongated body.

30. (original) The method of claim 29, further comprising:

placing the elongated body inside a sheath while being at least partially compressed;

inserting the sheath into the hollow organ;
ejecting the elongated body from the sheath; and
expanding the elongated body.